## Overview of Days 1 and 2

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## Day 1 – Where do we stand?

#### <u>Veva Deheza – Workshop Goals</u>

- Share drought preparedness experiences across all sectors
- Identify drought adaptation pathways in the face of increasing population/demand and warming climate
- Promote communication between State Government and constituents on drought and climate change

#### State of the State

#### Gov. Ritter's Colorado Climate Action Plan

- Emission reduction goals
- "New energy economy"
- Carbon sequestration (no till/low till)
- Water adaptation
  - Vulnerabilities under compacts
  - Update of the State Drought Mitigation and Response Plan
- Commitment to "Stubborn Stewardship"

# State of the State - Water Adaptation

#### Harris Sherman - Natural Resources

- Population growth, energy development, and climate change
- Only 23% of communities have drought plans need to do better

#### Martha Rudolph - Public Health and Environment

- Water quality impacts of drought and CC
- Reduced dilution; enhanced sediment/pollutant transport (including fire scars); increased T, DO; reduced biodiversity

## **Drought and Climate in Colorado**

- Experts reviewed history paleo and recorded
- New studies:
  - Colorado River Water Availability Study
  - Front Range Climate Change Vulnerability Study
  - USGS Snowmelt Timing Study
- Climate Change in Colorado: A Synthesis to Support Water Resources Management and Adaptation (NOAA and CU)
  - A Colorado perspective on the most current climate change science

## **Drought Planning Experiences**

- Status of drought planning in the West and U.S.
- Study on effectiveness of water conservation
- Water quality impacts of drought/CC and regulatory implications
- Experiences in Arizona and California
- Latest research results from a study of risk of Lake Powell going dry:
  - Risk is low till 2026 under all scenarios
  - Risk skyrockets thereafter for high emissions scenarios

### Day 2 – What do we need?

- Overview of the National Integrated Drought Information System (NIDIS)
  - Pilot drought early warning system for the Upper Colorado River Basin
- History of the Colorado Drought Plan and its update to address climate change impacts and adaptation strategies
- Thematic Panels
  - Ag "buy and dry" pressures, need for better decision support information and tools

### Day 2 – What do we need?

- Thematic Panels
  - Municipal Front Range Climate Change Vulnerability Study; Urban demand management success stories; Example of the Boulder drought and CC planning study
  - Environment and Recreation Threats to sport fisheries; Importance of forest headwaters; WGA wildlife corridor initiative; Ski industry drought planning and perspective on CC
  - Communication Planning Maintaining positive relationships; 2002 public education successes; Observed similarity of conservation behavior

## Day 3 – Taking Action

- Responding to Drought and Adapting to Climate Change (Brad Udall, WWA)
- Developing a Drought Early Warning System (Robin Webb, NOAA)
  - Live demonstration of the NIDIS Drought Portal
- Facilitating Proactive Risk Management (Roger Pulwarty, NOAA/NIDIS; Duane Smith, OK Water Resources Board)